

ABSTRACT

An instrumentation system which provides relatively precise time correlation among obtained measurements without dependence on trigger signal timing. An instrumentation system according to the present teachings includes a set of instruments each having a clock and an event buffer for periodically logging a data record. Each data record includes a set of measurement data and a time-stamp obtained from the corresponding clock. The instrumentation system includes mechanisms for maintaining a synchronized time in the clocks and mechanisms for stopping the logging in the event buffers in response to an event of interest. Once event logging is stopped, the data records in the event buffers may be correlated using their time-stamps and a time-stamp associated with the event of interest.